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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,713	04/09/2004	Takuya Ito	251424US2	8742

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OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER

PANG, ROGER L

ART UNIT PAPER NUMBER

3681

DATE MAILED: 11/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/820,713

Applicant(s)

ITO, TAKUYA

Examiner

Roger L. Pang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4-9-04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

### **DETAILED ACTION**

The following action is in response to application 10/820,713 filed on April 9, 2004.

#### ***Claim Objections***

Claims 2 and 4 are objected to because of the following informalities: the word “wherein” should be inserted after the dependent claim references. Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Kawamura ‘647.

With regard to claim 1, Kawamura teaches a vehicle which includes a hydraulic power transmission device, comprising: a front cover 2 of the hydraulic power transmission device; a first oil chamber B and a second oil chamber A to and from each of which predetermined hydraulic pressure is provided, and each of which is in the hydraulic power transmission device; a lock-up clutch 41 which is configured to directly connect an input side and an output side of the hydraulic power transmission device when the lock-up clutch and the front cover are placed in contact with each other according to a hydraulic pressure difference between the first oil chamber and the second oil chamber, and a lock-up clutch portion 22 which controls engagement force of the lock-up clutch with respect to the front cover by changing pressing force that presses

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the lock-up clutch to the front cover, the pressing force being changed by changing the hydraulic pressure difference; wherein the lockup clutch is in contact with the front cover due to predetermined pressing force via 35 when the hydraulic pressure difference is substantially zero (Abstract). With regard to claim 2, Kawamura teaches the vehicle, wherein the predetermined pressing force when the hydraulic pressure difference is substantially zero corresponds to a slip state of the lock-up clutch (depending on input speed). With regard to claim 3, Kawamura teaches the vehicle, wherein the second oil chamber A is positioned between the front cover and the lock-up clutch, the first oil chamber B is positioned so as to be opposed to the second oil chamber with the lock-up clutch being therebetween, and the hydraulic pressure difference is obtained by subtracting the hydraulic pressure in the second oil chamber from the hydraulic pressure in the first oil chamber (B-A); and the lock-up clutch control portion places the lock-up clutch in contact with the front cover using predetermined pressing force via 35 even when the hydraulic pressure difference is a predetermined negative value (Col. 3, lines 31-40). With regard to claim 4, Kawamura teaches the vehicle, wherein the predetermined pressing force when the hydraulic pressure difference is the predetermined value corresponds to a slip state of the lock-up clutch (depending on input speed). With regard to claim 5, Kawamura teaches the vehicle, wherein the second oil chamber A is positioned between the front cover and the lock-up clutch, and the first oil chamber is positioned so as to be opposed to the second oil chamber with the lock-up clutch being therebetween; and the lock-up clutch control portion increases the pressing force by increasing a hydraulic pressure that is provided to the first oil chamber B, an decreasing the pressing force by increasing a hydraulic pressure that is supplied to eh second oil chamber A.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamura as applied to claim 1 above, and further in view of Reggiardo and in further view of Jamzadeh. Kawamura teaches the vehicle, wherein the drivetrain comprises of an automatic transmission (Col. 1), but lacks the teaching of specific shift control. Reggiardo teaches a vehicle, wherein a shifting control portion 20 which controls shifting by switching between an engagement state and a disengagement state of a frictional engagement devices in an automatic transmission 22 to which output torque of an engine is input, the shifting control portion placing the automatic transmission in a neutral state (neutral "gear") when a rotational speed of the engine is equal to or lower than a predetermined rotational speed (Col. 9, lines 25-26) when the vehicle is stopped (Col. 9, line 17). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Kawamura to employ the shift control strategy in view of Reggiardo in order to economize the vehicle's engine operation and minimize wear on the transmission (Col. 2, lines 36-37). Kawamura also lacks the teaching of causing the frictional engagement to be semi-engaged or to be disengaged when switching to a neutral "gear." Jamzadeh teaches of an automatic transmission that is switched to neutral "gear" by causing the frictional engagement device to be semi-engaged or to be disengaged (Col. 1). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Jamzadeh to employ the neutral

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control strategy in further view of Jamzadeh in order to simplify the transmission and save on parts.

### *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kundermann, Macdonald, Iizuka, Tsutsui, Evans and Shultz have been cited to show similar torque converters and transmission controls.

### FACSIMILE TRANSMISSION

Submission of your response by facsimile transmission is encouraged. The central facsimile number is (571) 273-8300. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mail room processing and delivery time. For a complete list of correspondence not permitted by facsimile transmission, see MPEP 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check should not be submitting by facsimile transmission separately from the check.

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Responses submitted by facsimile transmission should include a Certificate of Transmission (MPEP 512). The following is an example of the format the certification might take:

I hereby certify that this correspondence is being facsimile transmitted to the Patent and Trademark Office (Fax No. (571) 273-8300) on \_\_\_\_\_ (Date)

Typed or printed name of person signing this certificate:

\_\_\_\_\_  
\_\_\_\_\_

(Signature)


If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and MPEP 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roger L. Pang whose telephone number is 571-272-7096. The examiner can normally be reached on 5:30am to 4:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor can be reached on 571-272-7095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Roger L. Pang  
Primary Examiner  
Art Unit 3681

November 21, 2005